

REMARKS

Summary of the Office Action

Amendment filed May 10, 2006 is objected to under 35 U.S.C. § 1.32(a) because it introduces new matter into the disclosure

Claims 5 and 7 are rejected under 35 U.S.C. § 112, first paragraph.

Claims 5-7 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,257,771 to Okayasu in view of U.S. Patent No. 5,253,310 to Delbare or U.S. Patent Application Publication No. 2003-0053770 to Noddings further in combination with U.S. Patent No. 6,865,307 to Ma et al.

Claims 8-9 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Okayasu in view of Delbare or Noddings further in combination with U.S. Patent No. 6,489,012 to Yang et al.

Summary of the Response to the Office Action

Applicants have amended claims 5 and 6 to address the new matter issue and to traverse the rejection under 35 U.S.C. § 112, first paragraph. Also, Applicants respectfully submit that newly-amended claims 5 and 6 are not obvious over the combination of Okayasu, Delbare, Noddings and Ma et al. Moreover, Applicants respectfully submit that the rejection of claims 8 and 9 is improper and therefore should be withdrawn. Accordingly, claims 5-9 remain pending in this Application for further consideration.

New Matter Rejection Under 35 U.S.C. § 1.32(a)

The previous Amendment filed May 10, 2006 is objected to under 35 U.S.C. § 1.32(a) because it introduces new matter into the disclosure. Specifically, the limitation of “wherein the fixing jigs inside the epoxy resin are removed from the epoxy resin” is allegedly not supported by the disclosure. While Applicants do not acquiesce to the rejection, the limitation has been deleted from each of claims 5 and 7, and Applicants respectfully request that the new matter rejection be withdrawn.

Rejections under 35 U.S.C. §112, first paragraph

Claims 5 and 7 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the limitation in each of claims 5 and 7 of “wherein the fixing jigs inside the epoxy resin are removed from the epoxy resin” is allegedly not supported by the disclosure. While Applicants do not acquiesce to the rejection, the limitation has been deleted from each of claims 5 and 7, and Applicants respectfully request that the rejection under 35 U.S.C. §112, first paragraph, be withdrawn.

All Claims Define Allowable Subject Matter

Claims 5-7 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Okayasu in view of Delbare or Noddings further in combination with Ma et al. Claims 8-9 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Okayasu in view of Delbare or Noddings further in combination with U.S. Patent No. 6,489,012 to Yang et al. To the extent that the rejections might be reapplied to the claims as presently amended, they are respectfully

traversed as being based on references that, whether taken individually or in combination, do not teach or suggest the novel combination of features recited in the claims.

With regard to each of independent claims 5 and 7, as newly-amended, Applicants respectfully submit that Okayasu, Delbare, Noddings and Ma et al., whether taken individually or in combination, do not teach or suggest the claimed combination, including at least the recited feature of “wherein the fixing jigs are arranged at end portions of the optical fibers.” This feature is fully illustrated by at least Figs. 3a, 3d, 6a, 6d, 9a and 9c. According to this feature, the optical fibers are optimally embedded in the epoxy resin while being fixed by the fixing rigs at regular intervals.

In contrast to the present invention of newly-amended independent claims 5 and 7, none of the applied references teaches or suggests the above-noted feature. In other words, Applicants respectfully assert that Okayasu, Delbare, Noddings and Ma et al., whether taken individually or in combination, do not teach or suggest the claimed combination including at least the feature of “wherein the fixing jigs are arranged at end portions of the optical fibers,” as recited by each of newly-amended independent claims 5 and 7.

With respect to independent claims 8 and 9, the Final Office Action concedes on page 6 that “Okayasu (6,257,771) in combination with Delbare et al. (5,253,310) or Noddings et al. (2003-0053770) fails to teach the use of attaching members on the prepreg prior to cladding,” but relies upon Yang et al. to remedy their deficiencies. Specifically, the Final Office Action alleges at page 7 that “Yang et al. (6,489,012) teaches applying adhesive layers to the prepreg to align the cladding layers” by citing to the abstract of Yang et al.

In contrast to the present invention of independent claims 8 and 9, the abstract of Yang et al. merely discloses “[a]dhesive means are interposed between a plurality of both-face copper clad laminates.” Applicants respectfully submit that Yang et al. is totally silent about alignment process of using the adhesive means. In other words, Applicants respectfully submit that Okayasu, Delbare, Noddings and Yang et al., whether taken individually or in combination, do not teach or suggest a claimed combination including at least a feature of “a fourth step of placing copper clads on the upper and lower sides of the aligning members while aligning the copper clads with the semicured prepreg using the aligning members interposed between the semicured prepreg and the copper clads,” as recited by independent claim 8.

For similar reasons as those set forth above, Applicants respectfully submit that Okayasu, Delbare, Noddings and Yang et al., whether taken individually or in combination, do not teach or suggest the claimed combination including at least the feature of “a fourth step of placing a copper clad on the aligning member while aligning the copper clad with the waveguide layer using the aligning member interposed between the epoxy resin and the copper clad,” as recited by independent claim 9.

In addition, Fig. 3b of the present invention illustrates the dipping of the fixing jigs 50 combined with the optical fibers 20 into a vessel containing the epoxy resin 30 to embed the optical fibers 20 in the epoxy resin 30. Fig. 3c of the present invention illustrates the rolling of the fixing jigs 50 combined with the optical fibers 20 to embed the optical fibers 20 in the epoxy resin 30. In contrast to the present invention, none of the applied references teaches or suggest the above-noted features in Figs. 3b and 3c. For example, FIG. 12 of Noddings discloses that a waveguide core material is applied by a molding, screening or stenciling to form the waveguide

core 206. In accordance with an injection or transfer molding technique, a top plate having a depression corresponding to waveguide 202 is secured over the cavity plate 614. Thus, the present invention is distinct from Noddings at least in the embed method.

Accordingly, for at least the reasons set forth above, Applicants respectfully assert that the rejections of independent claims 5, 7, 8 and 9 should be withdrawn because all of the applied references, whether taken individually or in combination, do not teach or suggest each and every feature of these independent claims. MPEP § 2143.03 instructs that "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 409 F.2d 981, 180 U SPQ 580 (CCPA 1974)." Further, Applicants respectfully submit that the rejection of claim 6 should also be withdrawn at least because of its dependency upon independent claim 5 and for the reasons set forth above.

Without other rejections pending, Applicants respectfully assert that claims 5-9 are in condition for allowance.

CONCLUSION

In view of the foregoing, Applicants respectfully request entry of the amendments to place the application in clear condition for allowance or, in the alternative, in better form for appeal. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under

37 C.F.R. § 1.136 not accounted for above, such as an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

By: 

Xiaobin You
Reg. No. L0112

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Customer No.: 009629

MORGAN, LEWIS & BOCKIUS LLP

1111 Pennsylvania Avenue, N.W.

Washington, D.C. 20004

Telephone: 202-739-7000

Facsimile: 202-739-3001